What is claimed is: (For US)

1. A method of manufacturing a synthetic resin hollow member incorporating an intermediate element wherein after the intermediate element is disposed between a pair of synthetic resin-made half bodies, the half bodies are brought into abutment with each other and joined together at their abutting portions, whereby the synthetic resin hollow member incorporating the intermediate element is produced, the method comprising:

using a pair of rotary injection molding dies which can be opened and closed relative to each other and are rotatable relative to each other at angular intervals of (360/6n) degrees, each die having a half body molding section consisting of at least one male molding portion and two female molding portions in a repetitive sequence of male / female / female in the direction of rotation for each rotational run over an angle of (360 / 3n) degrees, each die also having an intermediate element molding portion provided between specified half body molding portions in the direction of rotation for each rotational run over an angle of (360 / 3n) degrees, and

a first die clamping step for closing and clamping the molding die pair;

a first injection step for injecting a melted resin mass into a molding cavity defined by closing the pair of molding dies for molding a first half body and a second half body through a combination of male and female portions and for molding an intermediate element to be set between the half bodies through a combination of intermediate element molding portions;

a first die rotating step for opening the pair of dies after the first injection step and causing the dies to rotate for an angle of (360 / 6n) degrees

relative to each other so that the intermediate element is mated to and fitted in the first half body;

a second die rotating step for opening the pair of dies again after the first die rotating step and causing the dies to rotate for a further angle of (360 / 6n) degrees relative to each other so that the first half body in which the intermediate element is set is mated to and brought into abutment with the second half body through a combination of female molding portions;

a second die clamping step for closing and clamping the pair of dies again after the second die rotating step; and

a second injection step for injecting a melted resin mass onto abutting portions of the half bodies for joining the two half bodies;

whereby upon every two rotational runs of the molding dies, a hollow member having the intermediate element set in place between the first and second half bodies can be obtained.

2. An apparatus for manufacturing a synthetic resin hollow member incorporating an intermediate element wherein after the intermediate element is disposed between a pair of synthetic resin-made half bodies, the half bodies are brought into abutment with each other and joined together at their abutting portions, whereby the synthetic resin hollow member incorporating the intermediate element is produced, the apparatus comprising:

a pair of molding dies assembled together so as to be opened and closed relative to each other;

rotary mechanism for rotating at least one of the molding dies over an angle of (360/6n) degrees for each turn relative to the other molding die; and

injection machine for injecting a melted resin mass into a molding

cavity defined by the pair of molding dies being closed;

the molding dies each having a half body molding section consisting of at least one male molding portion and two female molding portions provided in a repetitive sequence of male / female / female in the direction of rotation for each rotational run over an angle of (360/3n) degrees, and an intermediate element molding portion provided between specified half body molding portions in the direction of rotational movement for each (360/3n) degrees; and wherein:

for every two rotational runs of the molding dies, a first injection is carried out such that first and second half bodies are molded by a combination of male and female molding portions, and an intermediate element to be set between the first and second half bodies is molded by a combination of intermediate element molding portions, and after the intermediate element is mated to and fitted in the first half body molded at the first injection step, the first half body in which the intermediate element is set is mated to and abutted with a corresponding second half body so that the half bodies are assembled into a molded product, and a second injection is carried out such that melted resin is injected onto the abutting portions of the two half bodies for joining the half bodies together, whereby for every two rotational runs of the molding dies, a hollow member with the intermediate element set between the first and second half bodies can be obtained.

3. A synthetic resin hollow member adapted to incorporate an intermediate element therein by placing the intermediate element between a pair of synthetic resin-made half bodies, then causing the two half bodies to abut against each other and joining them at their abutting portions, wherein:

the synthetic resin hollow member is manufactured by using a pair of rotary injection molding dies which can be opened and closed relative to each other and are rotatable relative to each other over an angle of (360/6n) degrees for each turn, each die having a half body molding section consisting of at least one male molding portion and two female molding portions in a repetitive sequence of male / female / female in the direction of rotation for each rotational run over an angle of (360 / 3n) degrees, each die also having an intermediate element molding portion provided between specified half body molding portions in the direction of rotation for each rotational run over an angle of (360/3n) degrees; and

for every two rotational runs of the molding dies, a first injection is carried out such that first and second half bodies are molded by a combination of male and female molding portions, and an intermediate element to be set between the first and second half bodies is molded by a combination of intermediate element molding portions; after the intermediate element is mated to and fitted in the first half body molded at the first injection step, the first half body in which the intermediate element is set is mated to and abutted with a corresponding second half body so that the half bodies are assembled into a molded product, and a second injection is carried out such that melted resin is injected onto the abutting portions of the two half bodies whereby the half bodies are joined together so that in every two rotational runs of the molding dies, a finished product with the intermediate element set between the first and second half bodies can be obtained.